002.00170

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

7. 1

Applicants:

Alessi et al.

Serial No.:

09/937,009

Filed:

March 17, 2000

For:

ENZYME

RESPONSE TO NOTIFICATION OF DEFECTIVE RESPONSE

Commissioner for Patents Box PCT U.S. Patent and Trademark Office Washington, D.C. 20231

Dear Sir:

In response to the Notification of Defective Response, which was mailed by the United States Patent and Trademark Office on June 4, 2002, enclosed are:

- (X) Preliminary Amendment (8 pgs)
- (X) Sequence Listing (26 pgs), 3.5" Diskette in computer readable form
 & 1.821(f) Statement(1 pg)
- (X) A copy of the Notification of Defective Response (10 pgs)
- (X) The Commissioner is hereby authorized to charge any fees which may be required to Deposit Account No. 50-0772.

Dated: <u>26 June 2002</u>

Susan J. Braman Reg. No. 34,103

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P.O. Box 352

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Telephone: (585) 393-3002 Facsimile: (585) 393-3001

002.00170

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Alessi et al.

Serial No.: 09/937,009 Examiner:

Filed: March 17, 2000 Art Unit:

ENZYME For:

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)

Commissioner for Patents Box PCT U.S. Patent and Trademark Office Washington, D.C. 20231

Dear Sir:

I hereby certify that this Response to Notification of Defective Response (1 pg) with Copy of Notification, Sequence Listing pages 1-26 with 3 1/2" diskette and 1.821(f) Statement, and Preliminary Amendment (8 pgs) is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, Box PCT, U.S. Patent and Trademark Office, Washington, D.C. 20231 on

26 June 2002 (Date)

Susan J. Braman

Juan J. Br

"Express Mail" Mailing Label Number ET730023021US

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 09/937,009		
ATTN: NEW RULES CASES	: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."		
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.		
3Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.		
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.		
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.		
6PatentIn 2.0 "bug"	A "bug" in Patentln version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, Patentln would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.		
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped		
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.		
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000		
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.		
0 Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence		
1Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or		
-) ("Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)		
2PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.		
3Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.		

AMC/MH - Biotechnology Systems Branch - 08/21/2001



PCT09

RAW SEQUENCE LISTING DATE: 05/15/2002 PATENT APPLICATION: US/09/937,009 TIME: 16:04:41

Input Set : A:\P22517PC.txt Does Not Comply Output Set: N:\CRF3\05152002\I937009.raw Corrected Diskette Needed 3 <110> APPLICANT: Alessi, Dario m1-5 Balendran, Anudharan 5 Deak, Maria Currie, Ricahrd Downes, Peter Casamayor, Antonio 10 <120> TITLE OF INVENTION: Enzyme 12 <130> FILE REFERENCE: 002.00170 15 <140> CURRENT APPLICATION NUMBER: 09/937,009 17 <141> CURRENT FILING DATE: 2000-03-17 75 <220> FEATURE: 77 <223> OTHER INFORMATION: Description of Artificial Sequence peptide 81 <400> SEQUENCE: 2 83 Arq Glu Pro Arg Ile Leu Ser Glu Glu Glu Glu Met Ala Arg Asp 5 89 Phe Asp Tyr Ile Ala Asp Trp Cys 20 97 <210> SEQ ID NO: 3 99 <211> LENGTH: 24 101 <212> TYPE: PRT 103 <213> ORGANISM (Artificial Sequence 107 <220> FEATURE: 109 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide

113 <400> SEQUENCE: 3

DATE: 05/15/2002

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PATENT APPLICATION: US/09/937,009
                                                        TIME: 16:04:41
                Input Set : A:\P22517PC.txt
                Output Set: N:\CRF3\05152002\I937009.raw
115 Arg Glu Pro Arg Ile Leu Ser Glu Glu Glu Glu Met Phe Gly Asp
117 1
121 Phe Asp Tyr Ile Ala Asp Trp Cys
123
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129 <210> SEQ ID NO: 4
131 <211> LENGTH: 53
133 <212> TYPE: PRT
135 <213> ORGANISM (Artificial Sequence)
139 <220> FEATURE:
141 <223> OTHER INFORMATION: Description of Artificial Sequence (peptide
145 <400> SEQUENCE: 4
147 Glu Asp Val Lys Lys His Pro Phe Phe Arg Leu Ile Asp Trp Ser Ala
149 1
                    5
153 Leu Met Asp Lys Lys Val Lys Pro Pro Phe Ile Pro Thr Ile Arg Gly
                                     2.5
159 Arg Glu Asp Val Ser Asn Phe Asp Asp Glu Phe Thr Ser Glu Ala Pro
    35
                               40
165 Ile Leu Thr Pro Pro
        50
167
173 <210> SEQ ID NO: 5
175 <211> LENGTH: 23
177 <212> TYPE: PRT
179 <213> ORGANISM: (Artificial Sequence)
183 <220> FEATURE:
185 <223> OTHER INFORMATION: Description of Artificial Sequence peptide
189 <400> SEQUENCE: 5
191 Asp Glu Asp Ala Ile Lys Arg Ile Asp Gln Ser Glu Phe Glu Gly Phe
193 1
197 Glu Tyr Ile Asn Pro Leu Leu
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199
205 <210> SEQ ID NO: 6
207 <211> LENGTH: 6
209 <212> TYPE: PRT
211 <213> ORGANISM: Artificial Sequence
215 <220> FEATURE:
217 <223> OTHER INFORMATION: Description of Artificial Sequence : peptide
221 <400> SEQUENCE: 6
223 Phe Arg Asp Phe Asp Tyr
225
     1
231 <210> SEQ ID NO: 7
233 <211> LENGTH: 23
235 <212> TYPE: PRT
237 <213> ORGANISM: Ártificial Sequence
241 <220> FEATURE:
243 <223> OTHER INFORMATION: Description of Artificial Sequence peptide
247 <400> SEQUENCE: 7
249 Asp Glu Asp Ala Ile Lys Arg Ile Asp Gln Ser Glu Phe Glu Gly Phe
255 Glu Tyr Ile Asn Pro Leu Leu
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RAW SEQUENCE LISTING

DATE: 05/15/2002

TIME: 16:04:41

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PATENT APPLICATION: US/09/937,009
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257
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267 <212> TYPE: PRT
269 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
275 <223> OTHER INFORMATION: Description of Artificial Sequence peptide
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281 Pro His Phe Pro Gln Phe Ser Thr Ser Ala Ser
283
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289 <210> SEQ ID NO: 9
291 <211> LENGTH: 9
293 <212> TYPE: PRT
295 <213> ORGANISM Artificial Sequence
299 <220> FEATURE:
301 <223> OTHER INFORMATION: Description of Artificial Sequence peptide
305 <400> SEQUENCE: 9
307 Thr Phe Cys Gly Thr Pro Glu Phe Leu
309
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315 <210> SEQ ID NO: 10
317 <211> LENGTH: 6
319 <212> TYPE: PRT
321 <213> ORGANISM: Artificial Sequence
325 <220> FEATURE:
327 <223> OTHER INFORMATION: Description of Artificial Sequence peptide
331 <400> SEQUENCE: 10
333 Phe Glu Gly Phe Glu Tyr
335
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341 <210> SEQ ID NO: 11
343 <211> LENGTH: 13
345 <212> TYPE: PRT__
347 <213> ORGANISM: Artificial Sequence
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353 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
357 <400> SEQUENCE: 11
359 Arg Gln Arg Tyr Gln Ser His Pro Asp Ala Ala Val Gln
361
367 <210> SEQ ID NO: 12
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371 <212> TYPE: DNA
373 <213> ORGANISM: Artificial Sequence
377 <220> FEATURE:
379 <223> OTHER INFORMATION: Description of Artificial Sequence:pcr primer
383 <400> SEQUENCE: 12
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385 cgggatccga ggatgtaaaa aagcaccc
389 <210> SEQ ID NO: 13
391 <211> LENGTH: 7
393 <212> TYPE: PRT
395 <213> ORGANISM Artificial Sequence
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RAW SEQUENCE LISTING

RAW SEQUENCE LISTING DATE: 05/15/2002 PATENT APPLICATION: US/09/937,009 TIME: 16:04:41

Input Set : A:\P22517PC.txt

Output Set: N:\CRF3\05152002\I937009.raw

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419 <212> TYPE: PRT
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425 <220> FEATURE:
427 <223> OTHER INFORMATION: Description of Artificial Sequence peptide
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439 Leu Met Asp Lys Lys Val Lys Pro Pro Phe Ile Pro Thr Ile Arg Gly
                 20
                                     25
445 Arg Glu Asp Val Ser Asn Phe Asp Asp Glu Phe Thr Ser Glu Ala Pro
451 Ile Leu Thr Pro Pro Arg Glu Pro Arg Ile Leu Ser Glu Glu Gln
                             55
457 Glu Met Phe Arg Asp Phe Asp Tyr Ile Ala Asp Trp Cys
459 65
                         70
465 <210> SEQ ID NO: 15
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469 <212> TYPE: PRT
471 <213> ORGANISM: Artificial Sequence
475 <220> FEATURE:
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489 Leu Leu Ala Arg Arg Leu Pro Pro Pro Phe Val Pro Thr Leu Ser Gly
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                 20
495 Arg Thr Asp Val Ser Asn Phe Asp Glu Glu Phe Thr Gly Glu Ala Pro
497
             35
                                 40
501 Thr Leu Ser Pro Pro Arg Asp Ala Arg Pro Leu Thr Ala Ala Glu Gln
                             55
507 Ala Ala Phe Leu Asp Phe Asp Phe Val Ala Gly Gly Cys
509 65
                         70
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517 <211> LENGTH: 80
519 <212> TYPE: PRT
521 <213> ORGANISM: Artificial Sequence
525 <220> FEATURE:
527 <223> OTHER INFORMATION: Description of Artificial Sequence peptide
531 <400> SEQUENCE: 16
533 Lys Glu Ile Met Gln His Arg Phe Phe Ala Gly Ile Val Trp Gln His
539 Val Tyr Glu Lys Lys Leu Ser Pro Pro Phe Lys Pro Gln Val Thr Ser
```

DATE: 05/15/2002

TIME: 16:04:41

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Input Set : A:\P22517PC.txt
                Output Set: N:\CRF3\05152002\I937009.raw
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545 Glu Thr Asp Thr Arg Tyr Phe Asp Glu Glu Phe Thr Ala Gln Met Ile
                                 40
551 Thr Ile Thr Pro Pro Asp Gln Asp Asp Ser Met Glu Cys Val Asp Ser
        50
                             55
557 Glu Arg Arg Pro His Phe Pro Gln Phe Ser Tyr Ser Ala Ser Thr Ala
559 65
                         70
                                             75
571 <210> SEQ ID NO: 17
573 <211> LENGTH: 75
575 <212> TYPE: PRT
577 <213> ORGANISM: Artificial Sequence
581 <220> FEATURE:
583 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide
587 <400> SEQUENCE: 17
589 Gly Glu Val Gln Ala His Pro Phe Phe Arg His Ile Asn Trp Glu Glu
595 Leu Leu Ala Arg Lys Val Glu Pro Pro Phe Lys Pro Leu Leu Gln Ser
601 Glu Glu Asp Val Ser Gln Phe Asp Ser Lys Phe Thr Arg Gln Thr Pro
                                 40
607 Val Asp Ser Pro Asp Asp Ser Thr Leu Ser Glu Ser Ala Asn Gln Val
                             55
                                                 60
613 Phe Leu Gly Phe Thr Tyr Val Ala Pro Ser Val
                         70
615 65
621 <210> SEQ ID NO: 18
623 <211> LENGTH: 82
625 <212> TYPE: PRT
627 <213> ORGANISM Artificial Sequence
631 <220> FEATURE:
633 <223> OTHER INFORMATION: Description of Artificial Sequence peptide
637 <400> SEQUENCE: 18
639 Met Glu Ile Lys Ser His Val Phe Phe Ser Leu Ile Asn Trp Asp Asp
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645 Leu Ile Asn Lys Lys Ile Thr Pro Pro Phe Asn Pro Asn Val Ser Gly
647
                                     25
651 Pro Asn Glu Leu Arg His Phe Asp Pro Glu Phe Thr Glu Glu Pro Val
657 Pro Asn Ser Ile Gly Lys Ser Pro Asp Ser Val Leu Val Thr Ala Ser
                            55
663 Val Lys Glu Ala Ala Glu Ala Phe Leu Gly Phe Ser Tyr Ala Pro Pro
665 65
                        70
669 Thr Asp
677 <210> SEQ ID NO: 19
679 <211> LENGTH: 76
681 <212> TYPE: PRT
683 <213> ORGANISM: Artificial Sequence_
687 <220> FEATURE:
689 <223> OTHER INFORMATION: Description of Artificial Sequence; peptide
693 <400> SEQUENCE: 19
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/937,009

This error in subsequent sequences.
5/15/02

•

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/937,009

DATE: 05/15/2002 TIME: 16:04:42

Input Set : A:\P22517PC.txt

Output Set: N:\CRF3\05152002\1937009.raw



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patenss, Box PCT United States Patent and Trademark Office Washington, D.C. 2023

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY	00200170	
09/937,009	Dario Alessi	00		
		INTERNATIONAL APP	LICATION NO.	
	PCT/GB00/01004		01004	
Karla M Weyand	[I.A. FILING DATE	PRIORITY DATE	
Braman & Rogalskyj	_	03/17/2000	03/19/1999	

Karla M Weyand Braman & Rogalskyj PO Box 352 Canandaigua, NY 14424-0353

CONFIRMATION NO. 2823
371 FORMALITIES LETTER

OC000000008210431

Date Mailed: 06/04/2002

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- U.S. Basic National Fee
- Priority Document
- Biochemical Sequence Listing
- · Copy of IPE Report
- · Copy of references cited in ISR
- Copy of the International Application
- . Copy of the International Search Report
- · Oath or Declaration
- Preliminary Amendments
- Request for Immediate Examination

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
 - A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e).
 - A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of 37 CFR 1.822 and/or 1.832,

as indicated on the attached marked-up copy of the "Raw Sequence Listing."

- APPLICANT MUST PROVIDE:
 - An initial or substitute computer readable form (CRF) of the "Sequence Listing."
 - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
 - A statement that the contents of the paper or compact disc and the computer readable form are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.825(d).
- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
 - For Rules Interpretation, call (703) 308-4216
 - To Purchase Patentin Software, call (703) 306-2600
 - For Patentin Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov
 - A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e).
 - A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice **MUST** be returned with the response.

SHAKEEL AHMED

Telephone: (703) 305-3659

PART 2 - OFFICE COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO	ATTY. DOCKET NO.
09/937,009	PCT/GB00/01004	00200170

FORM PCT/DO/EO/916 (371 Formalities Notice)